

EXAMINATION REPORT

HAWK 1-3, NICH 3 Copper Deposit  
Marsh Lake Area (105-<sup>D</sup>~~R~~-9)  
Whitehorse M. D., Yukon

by  
A. Cameron Ogilvy P.Eng.  
for  
Ogilvy 1971 Joint Venture



September 17, 1971

Work done between Aug. 24

This report has been examined by the Geological Evaluation Unit and is recommended to the Mining Inspectors to be considered and Sept. 17, 1971 for the amount of \$503.30

*D.B. Craig*

Completed as required within work under Section 14 (a) of the Yukon Mining Act.

*[Signature]*

Commissioner of Yukon Territory

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Fig. 1: Location Map

Fig. 2: Geology and Geochemistry

Examination Report  
HAWK 1-3, NICH 3 Copper Deposit  
Marsh Lake Area (105-B-9)  
Whitehorse M. D., Yukon

1. Summary

Copper mineralization in apparently sub-economic grades occurs in volcanic and associated sedimentary rocks.

2. Introduction

This property was briefly examined by the writer on August 24, 1971, and again by J. Stockwell on August 30. Four rock samples and thirty-seven soil samples were taken and analysed for copper.

3. Property and Ownership

The property consists of four claims.

<u>Claim</u>	<u>Grant No.</u>	<u>Recorded</u>
Hawk 1	Y38294	Sept. 30/69
Hawk 2	Y38295	Sept. 30/69
Hawk 3	Y38296	Sept. 30/69
Nich 3	Y25009	June 23/69

They are recorded in Whitehorse M. D. in the names of Mr. and Mrs. M. Nichiporich of Whitehorse.

4. Location and Access

The property lies at 60° 34.8' N., 134° 24' W. at an elevation of 2500 feet a.s.l. Access is by a 2-wheel-drive 2.7 mile earth road in good condition which leaves the Alaska Highway at mile 887.25. Thus the claims lie 3 miles north of Marsh Lake, 24.5 miles from rail at Macrae and 33 miles from Whitehorse.

5. History

This deposit has been known for many years and is referred to by Wheeler (G.S.C. Memoir 312). Only its proximity to Whitehorse recommends it. Previous work evidently consisted of sinking shafts (one 30' deep, the other caved), blasting 3 trenches and at least 4 minor test pits which have since sloughed in.

In October, 1969, the property was examined by S. Zimmer for R. G. Hilker Ltd. In 1970, the present owner drilled an 87' x-ray DDH and moved some earth.

6. Geology

a. Regional

The prospect lies within Map Unit B ("Volcanic Rocks of Uncertain Age") used by Wheeler.

This unit is renamed Map Unit "A<sub>M</sub>" (Metamorphosed Volcanic Rocks) on the geology map 109-3-A accompanying the memoir. The unit is described as "green, saussuritized basalt flows, dark green and maroon breccias and bedded tuffs or greywackes...".

b. Property

Units identified on the property included volcanic rocks (andesite, hornblende porphyry, breccia), sedimentary rock (chert), aplite (dykes and veins) and skarn (pyritized garnet-calcite-epidote). Detailed descriptions are given below. (Letters following unit names refer to map legend, fig. 2):

(1) Hornblende feldspar porphyry (H)

Dark green, with hornblende (and, locally,) phenocrysts (up to  $\frac{1}{4}$ " in largest dimension) in a much finer grained groundmass containing biotite. Variations noted while mapping were restricted to lighter color and presence or absence of feldspar phenocrysts. The hornblende shows some alteration to biotite, and saussurization of the rock was more noticeable near the skarn and some fracture zones.

(2) Andesite (V)

Light green, moderate grain size, with wide variation in hornblende content. This rock appears to be gradational with the groundmass of the previously described porphyry.

Detailed divisions within the volcanics were not mapped beyond distinguishing andesite and hornblende porphyry, since these rocks have no direct influence on the mineralization. Saussurization of both units was noticeable in most of the outcrop mapped.

(3) Skarn (S)

Garnet-calcite-epidote skarn with associated pyrite, pyrrhotite, and very minor copper mineralization. Skarn minerals may have derived from calcareous volcanic rocks rather than from limestone, since it occurs as local lenses (tens of feet) rather than as persistent beds.

(4) Chert (c)

Light green to dark grey banded chert is associated with the skarn.

(5) Breccia (X)

The breccia consists of fine grained silicified or bleached (?) fragments of buff-colored volcanic rock cemented by a mixture of quartz (open-space filling) and calcite. Limonite stain is concentrated in the calcite which occurs at the contact of quartz with volcanic fragments. The origin of this breccia unit is not known, but it probably is a porous flow breccia with post-depositional cementing.

(6) Aplite (A)

This aphanatic light-grey green rock occurs in dykes (from 1 inch to 10 ft in width, with up to 30 ft exposed length). The larger "dykes" may be in fact rhyolite flows, but their orientation is parallel to dominant fractures. No quartz phenocrysts were observed.

7. Mineral Deposit

Copper mineralization occurs in two modes: (1) in cherts at or near their contacts with the volcanic rocks, and (2) with quartz in the brecciated volcanic rocks. Mineralization consists of disseminated pyrite

with very minor chalcopyrite and traces of bornite. Secondary malachite, azurite and limonite form noticeable stains on the dumps and in the pits.

"Selected material" from the two shafts and the largest trend submitted for assay by Zimmer reportedly returned 2.8%, 0.85% and 3.0% Cu respectively. Assays said to be of drill core submitted by Mr. Nichiporick ran .03%, .04%, .03% and .05%.

During the present examination the following samples were taken for assay purposes:

Sample	Location	Type	%Cu
1476	No. 2 Shaft	3.0 ft chip channel	0.02
1477	Large trench	muck, selected	0.10
1478	" "	" "	.03
1479	" "	3.5 ft chip channel	.02

8. Geochemistry

Of 37 soil samples taken, 3 exceeded 15 ppm. Median is 6 ppm, mean is 7.6 ppm (uncut) or 6.6 if highs are cut to 15. Sample locations and results are shown on fig. 2. From the limited data, open anomalies appear to exist at the west end of the baseline and at the southeast corner of the grid.

*A. C. Ogilvy*  
A. C. Ogilvy, P.Eng.

DATE September 7, 1971.  
 FILE NO. 6970-6

# ASSAY CERTIFICATE

WHITEHORSE ASSAY OFFICE  
 P.O. BOX 346, WHITEHORSE, YUKON

RECEIVED FROM Mr. And. Griffin

SAMPLE NO.	ASSAYED OZ. PER TON	RECOVERED OZ. PER TON	Copper	Spectro				
1476			.02	-	Re DON, Hawk, Dick, Elaine			
1477			.10	-				
1478			.03	-				
1479			.02	-				
1480			-	71-27				
1481			-	71-28				
				Both Sent Sept. 4/71.				

ASSAYER K. Hayland for J. Spalding

DATE May 27, 1970.  
 FILE NO. 5996-4

# ASSAY CERTIFICATE

WHITEHORSE ASSAY OFFICE  
 P.O. BOX 346, WHITEHORSE, YUKON

RECEIVED FROM Mr. M. Nichiporick

SAMPLE NO.	GOLD OZ. PER TON	SILVER OZ PER TON	Copper					
1	.005	TR	.03	Re DON, Hawk, Dick, Elaine				
2	TR	TR	.04					
3	-	-	.03					
4	-	-	.05					

ASSAYER K. Hayland for J. Spalding



77 Teslin Road  
Whitehorse, Yukon

September 30, 1971

Mining Recorder,  
Whitehorse, Yukon

Sir:

RE: Application for Certificate of Work  
NICH 3 -- Y25009  
HAWK 1 - 3 -- Y38294 -- Y38296

I affirm that the following costs are attributable to my  
examination of the above claims:

Aug. 24	Exam. by A. C. Ogilvy and B. Smith, B.Sc.	
	A. C. Ogilvy 0.5 days @ \$150.	\$75.00
	B. Smith 0.5 days @ \$50.	25.00
	mileage 66 mi @ 0.20	13.20
Aug. 30	Exam by J. Stockwell, B.Sc.	
	1 day @ \$80.	80.00
	mileage 66 mi @ 0.20	13.20
Sept. 17	Office	
	A. C. Ogilvy 1 day @\$150.	150.00
	J. Stockwell 1 day @ \$80.	80.00
	Assays: 4 Cu @ \$3.00	12.00
	Soil determinations	44.40
	Printing maps	3.00
	Photocopying	7.50
		<u>\$503.30</u>

Yours very truly,



A. C. Ogilvy, P.Eng.

C A N A D A )

TO W I T : )

I, A.C. Ogilvy

of 77 Teslin Road, Whitehorse, Yukon Territory

do solemnly declare -

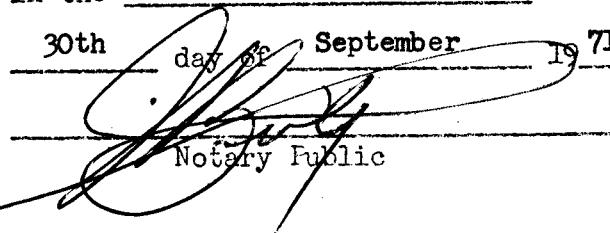
that the cost in the amount of \$503.30 attributable to my examination of the NICH AND HAWK mineral claims is to the best of my knowledge true and correct.

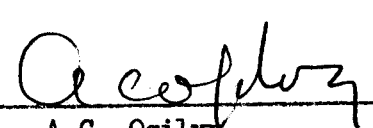
And I make this solemn declaration conscientiously believing it to be true and knowing that it is of the same force and effect as if made under oath.

Declared before me at Whitehorse, Yukon

in the Yukon Territory this

30th day of September 1971

  
Notary Public

  
A.C. Ogilvy

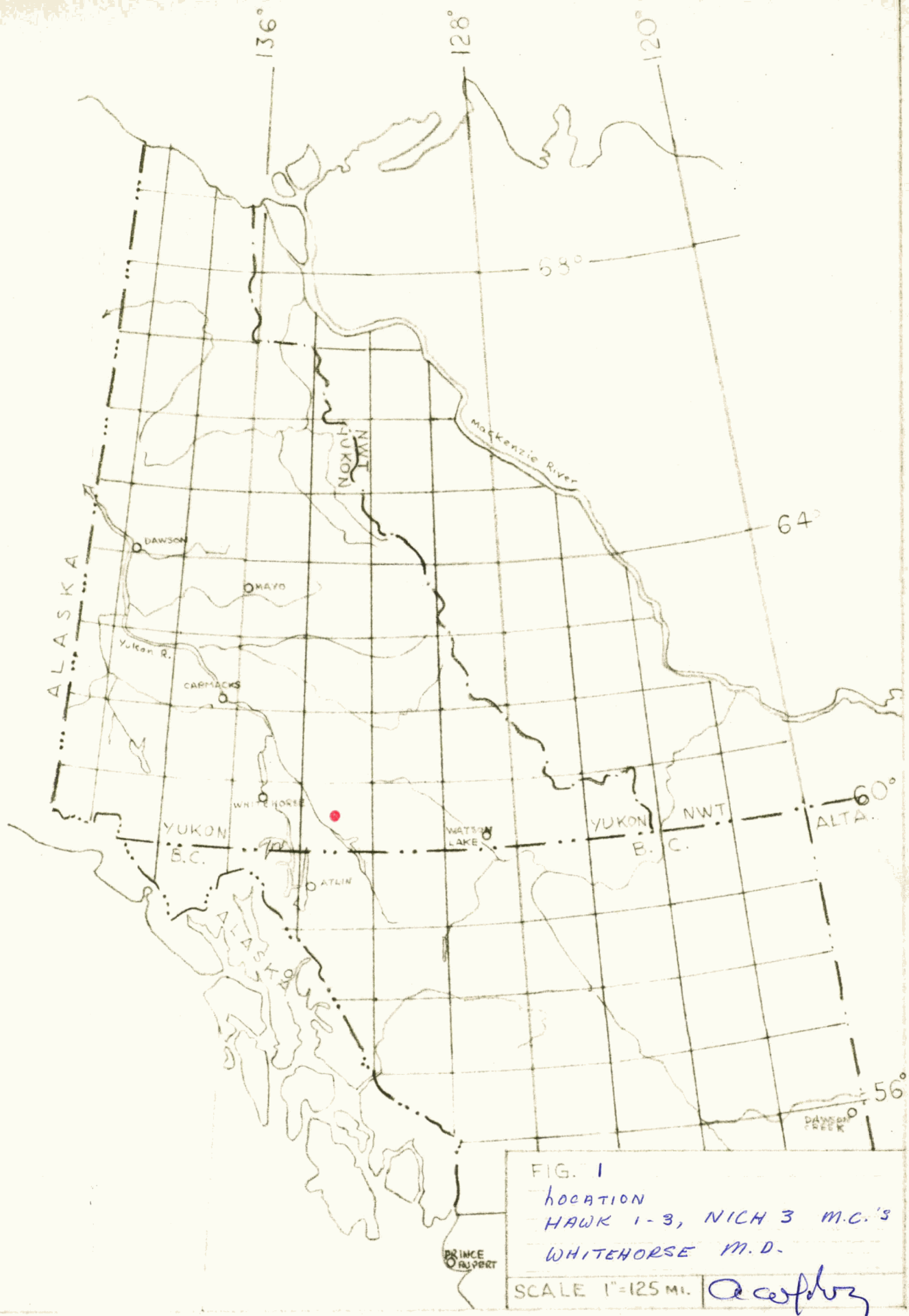


FIG. 1

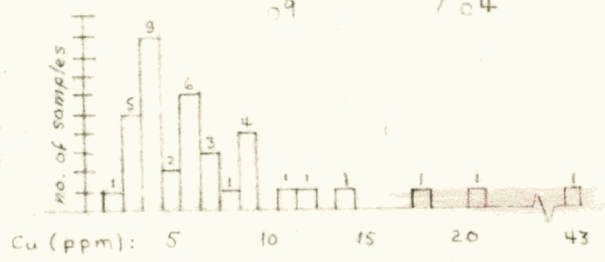
LOCATION  
 HAWK 1-3, NICH 3 M.C.'S  
 WHITEHORSE M.D.

SCALE 1"=125 MI.

C. C. ...

-  A Aplite(?) Dyke
-  Qtz-vole Breccia
-  C Chert
-  S Skarn
-  V Andesite
-  H H Hornblende Porphyry

SAMPLE No.	L.	%Cu
1479	3.5'	0.02
1478	much	.03
1477		.10
1476	3.0'	.02



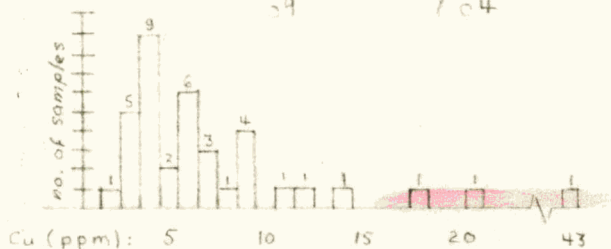
HAWK 1-3 & NICH MC's  
 Copper Showing  
 Marsh L. Area 105-D-9  
 WHITEHORSE M.D, YUKON  
 GEOLOGY & GEOCHEM.

1"=100'      QCD      SEPT 71

FIG. 2

-  A Aplite(?) Dyke
-  Qtz-vole Breccia
-  Chert
-  Skarn
-  Andesite
-  Hornblende Porphyry

SAMPLE No.	L.	%Cu
1479	3.5'	0.02
1478	muck	.03
1477	"	.10
1476	3.0'	.02



HAWK 1-3 & NICH M.C.'s  
 Copper Showing  
 Marsh L. Area 105-D-9  
 WHITEHORSE M.D. YUKON  
 GEOLOGY & GEOCHEM.

FIG. 2

1"=100'	QCO	SEPT 71
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